WHAT IS CLAIMED IS:

1. An alternator comprising:

a case;

a rotor disposed inside said case, said rotor including a rotor coil for generating a magnetic flux on passage of an electric current therethrough, and a plurality of claw-shaped magnetic poles extending in an axial direction and covering said rotor coil, said claw-shaped magnetic poles being magnetized into North-seeking (N) and South-seeking (S) poles by said magnetic flux;

a stator including a stator core provided with a plurality of slots formed so as to extend axially and be spaced circumferentially, and a stator winding mounted to said stator core;

brushes for supplying electric current from an electric power supply to said rotor coil; and

a brush holding assembly secured to said case, said brush holding assembly holding said brushes within a holding portion and being provided with a cover capable of being opened to remove said brushes,

an open portion for removal and insertion of said brushes being formed at a position on said case facing said cover.

2. The alternator according to Claim 1 wherein said brush holding assembly extends to a vicinity of said open portion.

3. The alternator according to Claim 1 wherein said brush holding assembly is constructed such that a holding assembly terminal is formed integrally therewith in a resin molding, said holding assembly terminal and a brush terminal mounted to a wire connected to said brushes being electrically connected by a connection member.

4. The alternator according to Claim 3 wherein a connection portion for connecting said holding assembly terminal and said brush terminal is disposed in said open portion.

5. The alternator according to Claim 3 wherein said connection member is a screw.

6. The alternator according to Claim 5 wherein said screw is inserted into and removed from said connection portion in a circumferential direction relative to said rotor.

7. The alternator according to Claim 5 wherein said screw is inserted into and removed from said connection portion in an axial direction relative to said rotor.

8. The alternator according to Claim 1 wherein a regulator for adjusting a magnitude of an alternating voltage generated in said stator and a cooling plate placed in contact with said regulator are disposed on said brush holding assembly so as to overlap in an axial direction relative to said rotor.

9. The alternator according to Claim 1 wherein a conducting wire of said stator winding extends outwards in an axial direction from an end surface of said stator core and is formed into coil ends having a uniform shape in a circumferential direction.